

Knitting as a promising self-management strategy for older women with osteoarthritis of the hands

A community-based pilot randomized controlled trial

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Research objective

- Examine the effectiveness of a **12-week supervised knitting program** on morning stiffness, pain, grip strength, hand function and quality of life in older women with mild to moderate **osteoarthritis of the hands**, compared to a waiting list control group.



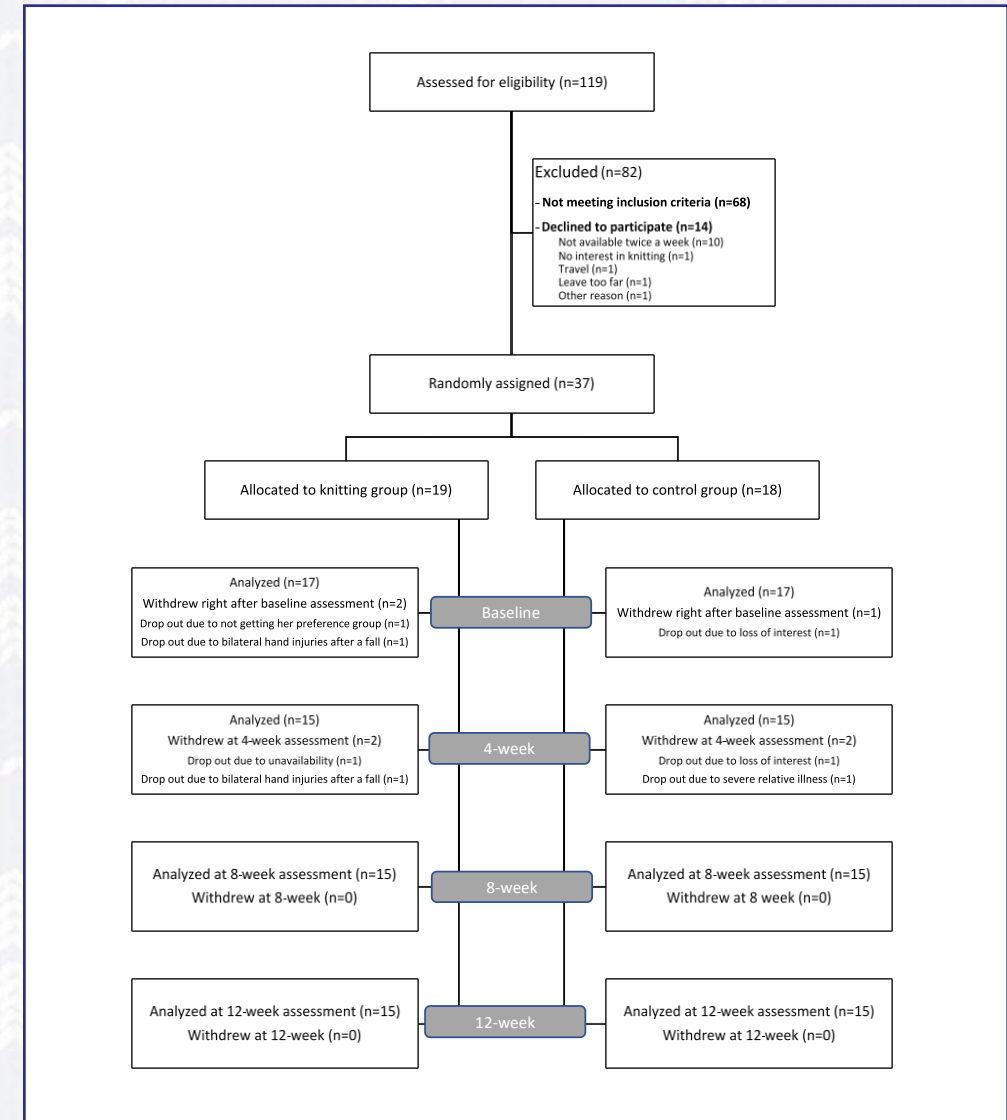
Methods

- RCT with parallel group design (single blind)
 - **Knitting group:** bi-weekly 20-min knitting session at senior's club + 20-min home daily knitting sessions for the 5 remaining week days for 8 weeks
 - **Control group:** educational pamphlet + usual care; participants were asked to avoid cryotherapy/thermotherapy in the morning
- Assessments were performed by a blinded evaluator at 0, 4, 8 and 12 week
 - Intervention: 0 to 8th week;
 - Follow-up: 8th to 12th week (no intervention)
- Diagnosis and severity of HOA were made by the ACR criteria by a rheumatologist

Outcome measures

- Australian/Canadian Osteoarthritis Hand Index
 - Morning stiffness
 - Pain
 - Hand function
 - Quality of life
- Hand-held dynamometer
 - Grip strength

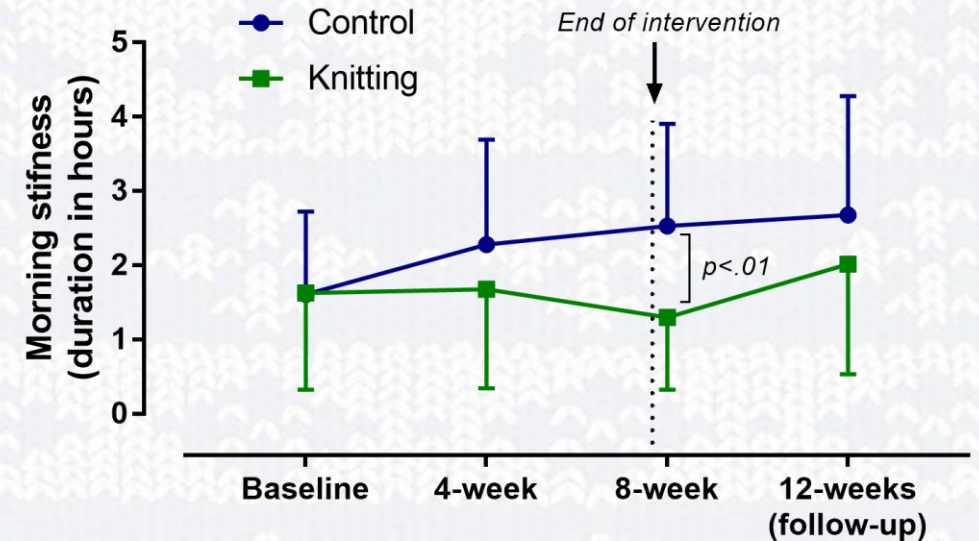
Figure 1. PRISMA flow diagram



Results and conclusion

- Participants in the knitting group tended to report higher pain compared to the control group; differences were statistically significant at 4 weeks ($p < .05$) but never reached clinical significance (small effect with no noticeable effect on daily life).
- The duration of morning stiffness was lower in the knitting group at 8 weeks compared to the control group (see Figure 2).
- No other differences were noted between the two groups for the other time measures and clinical outcomes (all p -values > 0.05).

Figure 2. Morning stiffness



Conclusion

- Although knitting can slightly and transiently increase pain in the first 4 weeks, its use can be beneficial to **reduce morning stiffness**.
- This beneficial effect is not observed at follow-up, suggesting that this type of activity **needs to be performed on a regular basis**.

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